CTEH THE SCIENCE OF READY™

South 4 Group Fire

Port Neches, TX

School Assessment Plan

Prepared on Behalf of:

TPC Group

Prepared By:

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Introduction

In response to the South 4 Group Fire and at the request of TPC Group with Unified Command (UC), CTEH® has been asked to conduct real-time air monitoring assessments and analytical air sampling at the elementary, middle, and high schools in Port Neches, TX located near the facility[1]. These air monitoring screening events are being conducted as a precautionary measure to evaluate air quality in and around the schools near the facility due to continuing remedial activities at the TPG Facility.

To assess 1,3-butadiene at schools in proximity to the South 4 Group Fire, CTEH® may conduct a survey of each school before school hours at a time determined by UC. This survey may include an air monitoring evaluation both inside and outside of the school buildings. At each school surveyed, CTEH® will utilize hand-held air monitoring instruments to measure the airborne concentration, if any, 1,3-butadiene in conjunction with general volatile organic compounds (VOCs[2]). Because 1,3-butadiene has an odor described as *"mildly aromatic"* which may be observed at airborne concentrations <1 ppm, the presence or absence of incident-associated odors may be documented. Additional real-time air monitoring assessments may be conducted if the presence of airborne 1,3-butadiene is sustained above the UC-approved action levels derived. CTEH® will continue 24-hour real-time air monitoring around the exterior of the school buildings and with the community surrounding the TPC Group facility per the Air Sampling and Analysis Plan (SAP). In addition, CTEH® may deploy 24-hour analytical air sampling stations within each school building.

An overview of the real-time air monitoring techniques and approach is provided in detail below.

Daily Real-Time Air Monitoring Assessments

CTEH® personnel may be deployed to various schools throughout the Port Neches, TX community to conduct daily real-time air monitoring assessments, including but not limited to Ridgewood Elementary School, Port Neches Elementary School, Port Neches Middle School, and Port Neches-Groves High School. Prior to the beginning of each school day, CTEH may conduct an external circumferential walk through of the property to document real-time air monitoring readings for 1,3-butadiene in conjunction with general VOCs that may be associated with the South 4 Group Fire remedial activities. An interior air monitoring evaluation of various locations throughout the building will also be conducted following the exterior assessment and may include hallways, classrooms, gymnasiums, cafeterias, etc. The results of each morning screen will be communicated to UC and district representatives. CTEH personnel will then conduct 24-hour exterior real-time air monitoring assessments for each school building throughout the day. If at any point 1,3-butadiene readings are detected at or above the UC action level of 0.5 ppm outside of the building, CTEH personnel will initiate communications with local and state entities and further assess the exterior of the building for sustained readings. If 1,3-butadiene levels are detected at or above the action level of 1.5 ppm sustained for 10 minutes, CTEH will then initiate communications with state and local entities to discuss further actions regarding shelter in place, evacuations, etc. A strike team will also be initiated to conduct interior real-time air monitoring for 1,3-butadiene in accordance with the Air Sampling and Analysis Plan (SAP) if requested by district representatives.

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[1] Including but not limited to Port Neches-Groves High School; Port Neches Middle School; Port Neches Elementary School; Ridgewood Elementary

[2] As assessed using a photoionization detector (PID) with a 10.6 eV lamp.

Throughout the exterior and interior assessments, CTEH will conduct real-time air monitoring at each school for assessment of 1,3-butadiene in conjunction with general VOCs using the Drager X-PID 8500/UltraRAE with 1,3-butadiene chemical specific media and the MultiRAE PID, respectively. These readings will be recorded electronically and communicated to UC. Action levels for exterior readings will be utilized as defined in the South 4 Group Fire Air Sampling Plan (Air SAP) for the response and associated actions are provided in **Table 1**, below.

Table 1. Indoor/Exterior Screening Levels for Real-Time Air Monitoring School Evaluations

Analyte	Action Level	Basis	Action to be Taken
VOCs	5.0 ppm Sustained exterior detection	General VOC reading; Unified Command Action Level	Report reading to PM/PTD; identify source of VOC, if possible. Conduct assessment for presence of 1,3-butadiene using chemical specific instruments
1,3-Butadiene	0.5 ppm 5-10 minutes Sustained exterior detection	Unified Command Action Level	Report reading to PM/PTD/Unified Command; initiate strike team to assess for sustained readings
	≥ 1.5 ppm 10 minutes Sustained exterior detection	Upper end of odor threshold range; value near TCEQ short-term AMCV Value of 1.7 ppm	Report reading to PM/PTD/Unified Command; initiate strike team to assess interior of building. Discuss further action with Unified Command and District representatives

Analytical Air Sampling

Prior to beginning daily real-time air monitoring screening, CTEH may collect discrete air samples for the first 24-hour period in and around each school building in high occupancy areas, such as cafeterias, libraries, gymnasiums, etc. using 1-liter MiniCans™. These analytical air samples will be sent to a 3rd party analytical laboratory for analysis of VOCs according to the United States Environmental Protection Agency (USEPA) Method TO-15.

Management of Change

Change from version 1.0 to 1.1
• *In the section titled:*

	Name/Organization	Signature	Date Signed
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References